

5/25

DART AEROSPACE LTD	Work Order:	22765
Description: Crosstube Extrusion	Part Number:	D6006-129
Dwg: D6006 Rev. A	Qty:	18
		Page 1 of 1

Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveler	JH	05.03.18	18
2	PG	Issue P/O: <u>7007762</u> a) Order as per Dwg D6006 b) Material: 3.250 x 0.515 wall 7075-T6/T6511 (WW-T-700/7 or QQ-A-225/9 or QQ-A-200/11) seamless aluminum tube c) Minimum ultimate tensile strength = 77 ksi d) Minimum tensile yield strength = 66 ksi e) Tolerance are per ASTM B210 (see details on Dwg D6006) f) Material certification required	LL	05.03.18	18
3	RG	Receive and Inspect for transit damage Ensure Material certification is attached	CL	05.07.08	18
4	QC6	Inspect Level 6 Ensure Material certification comply to Dwg D6006	WV	05.10.12	18
5	FP	Chemical Conversion Coat as per QSI 005 4.1	N/A	until 03/06	
6	QC3	Inspect Chemical Conversion Coat	N/A		
7	ST	Identify and Stock	CL	05.10.12	18
8	AC	Cost / part: <u>598.86</u>	JAC	05-10-26	18
9	DC	Close W/O <u>598.86</u> Inspect Level 21	JD	05/10/26	18

Rev	Date	Change	Revised By	Approved
A	00.11.21	New Issue	EC	
B	00.12.06	Added: Issue P/O	EC	
C	04.06.15	Added tolerance to Step 2	KJ/JLM	

RELEASED

05/04/2016

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: LS Date: 05/10/26

NOTE: Date & initial all entries

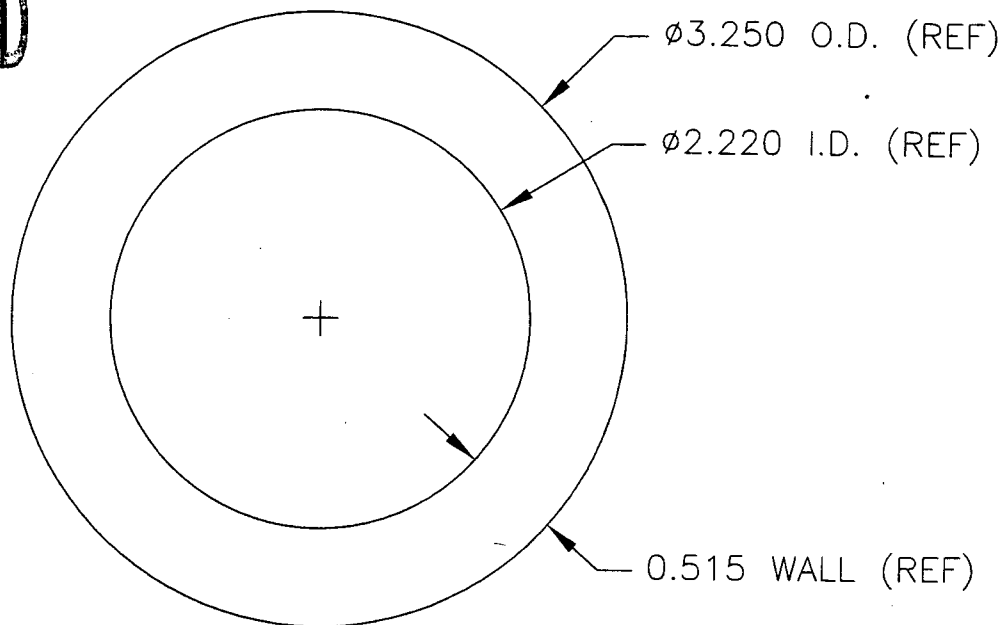
QA: N/C Closed: _____ Date: _____



DESIGN CP	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED A	APPROVED A	DRAWING NO. D6006	REV. A SHEET 1 OF 1
DATE 00.11.17		TITLE CROSSTUBE MATERIAL	SCALE 1:1
A	00.11.17	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
00.11.24



NOTES

- 1) D6006-XXX CROSSTUBE
LENGTH

WHERE XXX IS LENGTH IN INCHES
EG. 129" LONG TUBE: D6006-129

- 2) MATERIAL: 3.250 OD x 0.515 WALL 7075-T6/T6511 (WW-T-700/7 OR QQ-A-225/9 OR QQ-A-200/11) SEAMLESS ALUMINUM TUBE.
MINIMUM ULTIMATE TENSILE STRENGTH = 77 ksi
MINIMUM YIELD TENSILE STRENGTH = 66 ksi
- 3) TOLERANCES ARE PER ASTM B210 AS FOLLOWS:
O.D.: ± 0.008 MEAN (± 0.016 INCLUDING OVALITY)
WALL: ± 0.020 MEAN (± 0.052 INCLUDING ECCENTRICITY)
LENGTH: XXX $+0.188/-0.000$
STRAIGHTNESS: 0.010" DEVIATION / 12" LENGTH
- 4) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 5) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

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HOUTANCE

WORK ORDER

NO. 22765

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Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Mar 17, 2005
04:26 pm

Work Order No : 0022765
Project Name : D6006-129
Project For : WK525
Work Order Type : Main
Main WO Number :
House Part Number : D6006-129
Description : Crosstube material
Manufactured : Yes
Amount Req'd : 18
Amount Done : 0
Start Date : 03-17-05
Est Finish Date : 06-10-05
Act Finish Date :
Drawings Req'd : No
Ok for Approval :
Approval Rec'd :

Department Code:
Burden Flags : NNNNNNNN
WO Status : Open
Invoice State : Not Invoiced
Invoice Date :
Invoice Number :
Invoice Amount : 0.00

Order Entry No :
OE Value : 0.00

Est Mark Up : 0.000%
Actual Mark Up : 0.000%

\$0 Posted to Finished Goods
04 pm

	Estimated	Actual	Var. %	Posted	To Post
Material Cost	0.00	0.00	0.00	0.00	0.00
Engineering Hours	0.00	0.00	0.00	NNNNNN	
Engineering Cost	0.00	0.00	0.00	0.00	0.00
Production Hours	0.00	0.00	0.00	Invo ced	
Production Cost	0.00	0.00	0.00	0.00	0.00
Packaging Hours	0.00	0.00	0.00		
Packaging Cost	0.00	0.00	0.00	0.00	0.00
OverHead Hours	0.00	0.00	0.00		
OverHead Cost	0.00	0.00	0.00	0.00	0.00
CNC Hours	0.00	0.00	0.00		
CNC	0.00	0.00	0.00	0.00	0.00
Misc. Hours	0.00	0.00	0.00	0.00	
Misc.	0.00	0.00	0.00	0.00	0.00
Burden	0.00	0.00	0.00		
Total Cost	0.00	0.00	0.00		Cost
Mark up	0.000	0.000			
Selling Cost	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00

**ALUnna**

Abnahmeprüfzeugnis 3.1 - EN 10204:2004

Inspection Certificate 3.1 - EN 10204:2004 / Certificat de Reception 3.1- EN 10204:2004

Kunde: Dart Aerospace Ltd.

Client:

1270 Aberdeen Street
K6A1K7 Hawkesbury, ON Canada

Produkt:

Product / Produit:

Spezifikation:

Specification:

Werkstoff:

Alloy/Alliage:

Abmessung

Size / Dimension

Kennzeichnung

Marking/Marquage:

Tubes seamless extruded

AMS QQ-A-200/11E & ASTM B 210

7075

3,250" x 2,220" x 0,515" x 129,00"

ALUnna - Cert No. 363/05 - 7075 - T 6511 - Cast No. 04A310-04 - QQA 200/11E - 3.250" OD X 0.515" Wall - Heat
No. 66/04 - Lot 13568/2-1 PO. 2007762

Zeugnisnummer: 363/05

Cert No. / No. du certificat:

Bestellnummer: 2007762

Order No. / No. de commande

Auftrag: 13568/2

Our Reference/Notre Reference:

Zustand: T 6511

Temper/Etat

Lieferung

Delivered Material / Matériau livré:

pcs.

lbs

18

1034

1. Chemische Analyse

Chemical Analysis / analyse chimique

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Zr	Bi	Sn	Ni
Charge/ min.			1,2		2,1	0,18	5,1						
Cast No. max.	0,40	0,50	2,0	0,30	2,9	0,28	6,1	0,20					
04A310-04	0,1061	0,1950	1,4514	0,0408	2,5600	0,2037	5,8720	0,0329	0,0050	0,0095			

Elements without indication < 0,01 %

2. Mechanische Eigenschaften

Mechanical Properties / Valeurs Mécaniques

Anforderungen Requirements	tensile (Rm) ksi	yield (Rp0,2) ksi	elongation 2" %	elongation A %	Hardness HB	Heat No.
min.	77,0	66,0				
max.						
1	85,695	79,750	12,0		161	66/04
2	85,695	79,895	12,0		163	66/04

**Ergebnis der
Prüfungen:**

Es wird bestätigt, daß die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellannahme entspricht

Test results:

We confirm that the delivery has been tested and applies to the agreements made on receipt of the order

Resultats:

Nous confirmons que la livraison a été contrôlée et correspond avec les conventions faites à la réception de la commande

gswindU

25.05.2005



Certified acc. to DIN EN ISO 9001:2000, valid until 2005-03-09
Certificate No.: 001959 QM



ALUnna

Abnahmebeauftragter